



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/418,943	10/15/1999	TIMOTHY CHARLES SOWELL	202231	9508

7590 07/07/2004

MARK JOY
LEYDIG VOIT & MAYER LTD
TWO PRUDENTIAL PLAZA SUITE 4900
180 NORTH STETSON
CHICAGO, IL 606016780

EXAMINER

NGUYEN, NGA B

ART UNIT PAPER NUMBER

3628

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/418,943

Applicant(s)

SOWELL, TIMOTHY CHARLES

Examiner

Nga B. Nguyen

Art Unit

3628

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-77 is/are pending in the application.
- 4a) Of the above claim(s) 45-52 and 56-73 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-44, 53-55 and 74-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is the answer to the communication filed on April 9, 2004, which paper has been placed of record in the file.
2. Claims 1-12, 14-44, 53-55, and 74-77 are elected for consideration in this application.

Response to Arguments/Amendment

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Applicant's arguments with respect to claims 1-12, 14-44, 53-55, and 74-77 have been considered but are moot in view of new grounds of rejections.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-7, 9-12, 14-25, 27-35, 37-40, 42-44, 53-55, and 74-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Archibald et al (hereinafter Archibald), U.S. Patent No. 5,825,883, in view of Knapton, III (hereinafter Knapton), U.S. Patent No. 6,363,486, and further in view of Sobeski, U.S. Patent No. 6,499,035.

Regarding claim 1, Archibald discloses a method for charging customers for use of software comprising the steps of:

Art Unit: 3628

establishing a use-based pricing scheme for a set of software modules (column 7, lines 53-67);

distributing the set of software modules to a customer (column 4, lines 20-50);
monitoring customer use of the software modules (column 4, lines 50-65); and
charging the customer according to use of the distributed software modules as determined during the monitoring step (column 4, lines 50-60).

Archibald does not disclose the set of software modules comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class. However, Knapton discloses the software modules executed on the customer computer system is developed using object oriented programming comprises C++, Java, Visual Basic, COM, ActiveX, etc...(column 3, lines 30-58). Sobiski discloses the software modules executed on the customer computer system is developed using Java objects comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class (column 6, line 47-coumn 7, line 60). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Archibald's to include the feature above for the purpose of developing the Archibald's software application using object-oriented programming language such as Java objects as taught by Knapton and Sobiski for the purpose of time consuming and cost saving because object oriented programming is easy to create, cost effective to modify, and reusable.

Regarding claim 2, Archibald in modified by Knapton and Sobiski further disclose the customer creates a number of instances from a software module, and use of the software module is measured according to instances detected at a site of the

customer during the monitoring step (Archibald, column 6, lines 48-60; the meter software module generates accounting information includes many instances the user information, user ID, user account number, etc, if the Archibald's software application is developed using an object-oriented programming such as Sobiski's Java objects, the user information, user ID, user account number, etc in Archibald are objects or instances executed on the customer's computer).

Regarding claim 3, Archibald in modified by Knapton and Sobiski further disclose instances created from a software module are periodically accessed to determine use during the monitoring step (the meter software module accumulates the accounting information for a predetermined period of time, column 12, lines 33-42).

Regarding claim 5, Archibald in modified by Knapton and Sobiski further disclose providing a demonstration mode for instances such that instances in the demonstration mode are executable at a customer site without charge (demonstration mode is "trial use field 166", column 9, lines 25-35).

Regarding claim 6, Archibald in modified by Knapton and Sobiski further disclose maintaining a single agreement governing use of instances created from the set of software modules for an enterprise (column 7, lines 40-67; Many of instances are created when the user has terminated use of the software module, i.e. an application identification field, a price field, a user unit field, an amount user field, etc).

Regarding claim 7, Archibald in modified by Knapton and Sobiski further disclose monitoring a termination date for instances derived from a software module having a time-limited duration (instance "the rent to own field", column 9, lines 19-25).

Regarding claim 9, Archibald in modified by Knapton and Sobiski further disclose the steps of: maintaining an account for storing units of credit for a customer; and wherein charging step comprises decrementing the customer's credit account by an

Art Unit: 3628

appropriate number of units of credit based upon monitoring step (column 7, lines 20-30).

Regarding claim 10, Archibald in modified by Knapton and Sobiski further disclose generating a report summarizing use of software modules at the customer site (column 7, lines 40-67).

Regarding claim 11, Archibald in modified by Knapton and Sobiski further disclose the charging step is based upon registered uses of a software module (column 7, lines 53-67).

Regarding claims 12 and 74, Archibald in modified by Knapton and Sobiski further disclose the registered uses of a software module are measured according to execution and creation of an instance from the software module (see claim 1 above for details).

Regarding claims 14-15, Archibald in modified by Knapton and Sobiski further disclose the software module is an object class for creating an application engine object or an object class for creating a view engine object (see claim 1 above for details and column 5, line 65-column 6, line 47, the software module is download to the meter module at the consumer computer).

Regarding claim 16, Archibald in modified by Knapton and Sobiski further disclose the monitoring step comprises determining a time duration that an object instantiated from a software module is active (column 8, lines 43-46).

Regarding claim 17, Archibald in modified by Knapton and Sobiski further disclose the monitoring step comprises registering execution of an instance that tracks throughput of a process (The embedded check data 76 is utilized by the meter module 26 to insure that during operation, the program is being executed as the publisher had intended, column 5, line 65-column 6, line 12).

Regarding claim 18, Archibald in modified by Knapton and Sobiski further disclose individual ones of the set of software modules are individually priced (column 7, lines 52-67).

Regarding claim 19, Archibald in modified by Knapton and Sobiski further disclose the set of software modules includes at least a first software module supplied by a third party vendor and further comprising the step of: compensating a third party vendor based upon a use by a customer of the first software module determined during the monitoring step (column 7, lines 20-30).

Regarding claims 20-21, Archibald in modified by Knapton and Sobiski further disclose the distributing step comprises transmitting the set of software modules via a network connection comprises an Internet connection (column 3, lines 64-65).

Regarding claim 22, Archibald in modified by Knapton and Sobiski further disclose a step of reporting usage information to a software brokerage facility (column 10, lines 33-45).

Regarding claim 23, Archibald in modified by Knapton and Sobiski further disclose the reporting step includes identifying the location of an instance created from a software module (an application identification field identifies which software module included in the particular combined digital application module 212, see figure 5 and column 10, lines 1-12).

Regarding claim 24, Archibald in modified by Knapton and Sobiski further disclose determining that a license manager has not reported to a software brokerage facility and in response registering a communication failure at a central licensing facility (column 19, lines 40-50).

Regarding claim 25, Archibald in modified by Knapton and Sobiski further disclose the monitoring step includes storing use information in summary format in a database (column 7, lines 40-67).

Regarding claims 27-28, Archibald in modified by Knapton and Sobiski further disclose the software modules relate to industrial manufacturing automation software or relate to industrial manufacturing information software (automation software: active application, information software: passive application column 2, lines 37-44).

Regarding claim 29, Archibald in modified by Knapton and Sobiski further disclose maintaining an agreement governing use of instances created from the set of software modules for an enterprise wherein the instances comprise both lifetime billed and use-based billed instances (column 7, lines 53-67 and column 9, lines 19-25 and see claim 1 for details).

Regarding claims 30, Knapton discloses providing configuration tools enabling a user to create customized instances from the software modules (column 6, lines 48-67). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include this feature in Archibald's for the purpose of helping the user to create customized instances based on the configuration tools in the software product.

Regarding claim 31, Archibald discloses a method for vending software in the form of software modules via electronic commerce channels comprising the steps of:

- maintaining an electronic commerce site including a software module selection interface, the software module selection interface enabling a customer to request a software module for use at a customer site (column 4, lines 20-50);

- providing a software module management framework to the customer for installation at a customer site, wherein the management framework includes

Art Unit: 3628

components for registering use of the software module at the customer site (column 5, line 65-column 6, line 47); and

charging the customer based upon registered use of the software module (column 6, lines 48-67).

Archibald does not disclose the set of software modules comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class. However, Knapton discloses the software modules executed on the customer computer system is developed using object oriented programming comprises C++, Java, Visual Basic, COM, ActiveX, etc...(column 3, lines 30-58). Sobiski discloses the software modules executed on the customer computer system is developed using Java objects comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class (column 6, line 47-coumn 7, line 60).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Archibald's to include the feature above for the purpose of developing the Archibald's software application using object-oriented programming language such as Java objects as taught by Knapton and Sobiski for the purpose of time consuming and cost saving because object oriented programming is easy to create, cost effective to modify, and reusable.

Regarding claim 32, Archibald in modified by Knapton and Sobiski further disclose the use of the software module comprises executing an instance created from the software module (column 6, lines 33-47).

Regarding claim 33, Archibald in modified by Knapton and Sobiski further disclose the use of the software module comprises creating an instance from the downloadable module (column 4, lines 30-32).

Regarding claim 34, Archibald f in modified by Knapton and Sobiski urther disclose registering use of the downloadable module provides a measure of throughput of an industrial process (The embedded check data 76 is utilized by the meter module 26 to insure that during operation, the program is being executed as the publisher had intended, column 5, line 65-column 6, line 12).

Regarding claim 35, Archibald in modified by Knapton and Sobiski further disclose the module management framework supports creation of instances from software modules at the customer site having deferring use modes including at least: a lifetime mode and a use-based mode, and wherein method comprises the further step of registering execution of instances operating in the use-based mode (column 9, lines 19-25 and column 7, lines 40-67).

Regarding claim 37, Archibald discloses a method for charging customers for use of software comprising the steps of:

- providing a set of individually identifiable units of executable software (column 7, lines 58-67;

- individually pricing ones of the set of individually identifiable units of executable software (column 7, lines 58-67);

- authorizing use of the executable software (column 6, lines 33-47); and

- charging a customer based upon use of selected ones of the set of individually identifiable units of executable software (column 7, lines 58-67).

Archibald does not disclose the set of software modules comprise at least one object class from which objects are instantiated on a customer system and software

Art Unit: 3628

usage is measured according to object instances created from the at least one object class. However, Knapton discloses the software modules executed on the customer computer system is developed using object oriented programming comprises C++, Java, Visual Basic, COM, ActiveX, etc...(column 3, lines 30-58). Sobiski discloses the software modules executed on the customer computer system is developed using Java objects comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class (column 6, line 47-coumn 7, line 60). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Archibald's to include the feature above for the purpose of developing the Archibald's software application using object-oriented programming language such as Java objects as taught by Knapton and Sobiski for the purpose of time consuming and cost saving because object oriented programming is easy to create, cost effective to modify, and reusable.

Regarding claim 38, Archibald in modified by Knapton and Sobiski further disclose the authorizing step comprises transmitting a license file containing code enabling use by the customer of the executable software (column 6, lines 33-47 and column 11, line 28-column 12, line 22).

Regarding claim 39, Archibald in modified by Knapton and Sobiski further disclose the steps of: integrating self-monitoring process software within the executable software; and registering use of the executable software by the self-monitoring process (column 4, lines 1-6 and column 5, line 65-column 6, line 12).

Regarding claim 40, Archibald in modified by Knapton and Sobiski further disclose the executable software is industrial automation software (active application, column 2, lines 38-44).

Regarding claim 42, Archibald discloses a method for charging customers for user of software comprising the steps of:

first providing a set of software modules for software customers (column 4, lines 20-35);

second providing a software licensing facility including a broker facility through which software customers pay for software execution units, and wherein the broker facility includes a set of software customer accounts (column 4, lines 20-35 and column 7, lines 20-30); and

charging a software customer account a number of software execution value units based upon the value of software modules utilized by a customer (column 7, lines 53-67).

Archibald does not disclose the set of software modules comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class. However, Knapton discloses the software modules executed on the customer computer system is developed using object oriented programming comprises C++, Java, Visual Basic, COM, ActiveX, etc...(column 3, lines 30-58). Sobiski discloses the software modules executed on the customer computer system is developed using Java objects comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class (column 6, line 47-column 7, line 60).

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Archibald's to include the feature above for the purpose of developing the Archibald's software application using object-oriented programming language such as Java objects as taught by Knapton and Sobiski for the purpose of

Art Unit: 3628

time consuming and cost saving because object oriented programming is easy to create, cost effective to modify, and reusable.

Regarding claim 43, Archibald in modified by Knapton and Sobiski further disclose the charging step is performed by an automated billing process (column 7, lines 20-30).

Regarding claim 44, Archibald in modified by Knapton and Sobiski disclose providing an on-line customer interface; and wherein the first providing step includes the step of providing a network interface enabling users to download software modules from a remote location (column 3, lines 64-65 and column 4, lines 30-32).

Regarding claims 53-55, Archibald discloses a software module facilitating automated distribution of software to customers comprising: a supplier identification; a product description; an executable program; a billing definition includes a usage rate and a lifetime rate (column 6, lines 33-60).

Archibald does not disclose the set of software modules comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class. However, Knapton discloses the software modules executed on the customer computer system is developed using object oriented programming comprises C++, Java, Visual Basic, COM, ActiveX, etc...(column 3, lines 30-58). Sobiski discloses the software modules executed on the customer computer system is developed using Java objects comprise at least one object class from which objects are instantiated on a customer system and software usage is measured according to object instances created from the at least one object class (column 6, line 47-coumn 7, line 60). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Archibald's to include the feature above for the purpose

of developing the Archibald's software application using object-oriented programming language such as Java objects as taught by Knapton and Sobiski for the purpose of time consuming and cost saving because object oriented programming is easy to create, cost effective to modify, and reusable.

Claims 75-77 have similar limitations as found in claims 32-34, therefore, are rejected by the same rationale.

6. Claims 4, 8, 26, 36, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Archibald et al (hereinafter Archibald), U.S. Patent No. 5,825,883, in view of Knapton, III (hereinafter Knapton), U.S. Patent No. 6,363,486, in view of Sobeski, U.S. Patent No. 6,499,035, and further in view of Ahmad, U.S. Patent No. 5,925,127.

Regarding claims 4 and 36, Archibald does not teach the monitoring step comprises registering each day that an instance created from a software module is active and wherein the charging step comprises charging the customer a daily rate for use of the software module. However, Ahmad teaches charging the customer a daily rate for use of the software module (column 8, lines 65-67 and column 1, lines 50-51). Therefore, it is obvious to include charging the customer a daily rate for use of the software module in Archibald's for the purpose of time consuming.

Regarding claims 8, 26, and 41, Archibald does not explicitly teach the self-monitoring process software comprises includes functions for issuing a warning in response to detecting an upcoming expiration date for an instance of a software module or informing the customer of a need to reorder credit to continue using the executable software. However, Ahmad discloses the self-monitoring process software comprises includes functions for issuing a warning in response to detecting an upcoming expiration date for an instance of a software module or informing the customer of a need to

Art Unit: 3628

reorder credit to continue using the executable software (column 14, line 28-column 15, line 5). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include these features in Archibald's for the purpose of reminding the customer the expired date of software, so the customer does not forget to re-order credit in order to continue to use the software.

Conclusion

7. Claims **1-12, 14-44, 53-55, and 74-77** are rejected.

8. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure:

Fraley et al. (US 6,059,838) disclose a method and sytem for licensed design and use of software objects.

Takeuchi et al. (US 6,647,495) disclose the information processing apparatus and method.

Rose (US 5,708,709) discloses system and method fro managing try-and-buy usage of application.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nga B. Nguyen, whose telephone number is (703) 306-2901. The examiner can normally be reached on Monday-Thursday from 8:30 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough, can be reached on (703) 308-0505.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.

Art Unit: 3628

10. **Any response to this action should be mail to:**

Commissioner of Patents and Trademarks
c/o Technology Center 3600
Washington, D.C. 20231

or faxed to:

(703) 872-9326, (for formal communications intended for entry)

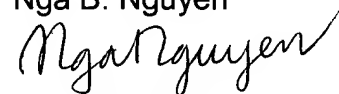
or:

(703) 308-3961 (for informal or draft communications, please

label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal
Drive, Arlington, VA, Seventh Floor (Receptionist).

Nga B. Nguyen



June 25, 2004